

APRIL 30, 2004
CONTRACT PERIOD THROUGH ~~APRIL 30, 2003~~

TO: All Departments

FROM: Department of Materials Management

SUBJECT: Contract for **PUBLIC WORKS AND RELATED SERVICES : TRAFFIC CONTROL [AKA LOOP DETECTOR INSTALLATION SERVICES]**

Attached to this letter is published an effective purchasing contract for products and/or services to be supplied to Maricopa County activities as awarded by Maricopa County on **APRIL 04, 2002**.

All purchases of products and/or services listed on the attached pages of this letter are to be obtained from the vendor holding the contract. Individuals are responsible to the vendor for purchases made outside of contracts. The contract period is indicated above.

Wes Baysinger, Director
Materials Management

WP/jmk
Attach

Copy to: Clerk of the Board
Ted Collins, MCDOT
Jim Baker, Transportation
Carmen Ledesma, Materials Management

(Please remove Serial 97182-SC from your contract notebooks)

SPECIFICATIONS ON INVITATION FOR BID FOR: **LOOP DETECTION INSTALLATION SERVICES**

1.0 **INTENT:**

The intent of this Invitation for Solicitation is to establish a contract to provide service, material, and equipment for Loop Detector Installation work to be furnished to Maricopa County Department of Transportation and other State, County and Municipal Agencies as covered by purchase order only. Also included are blanket discounts for related supplies as covered by current pricing documents. Amendments, supplements and/or revisions will be effective upon receipt and approval of notice to the Department of Materials Management.

2.0 **TECHNICAL SPECIFICATIONS:**

2.1 **SCOPE OF WORK:**

- 2.1.1 Maricopa County, in its function as Procurement Agency for the AZTech Public/Private Partnership is soliciting bids from qualified contractors to furnish all necessary labor, tools, equipment, parts and supplies to perform the installation of 6' x 6' and other loop detectors at various locations throughout Maricopa County.
- 2.1.2 This Invitation for Bids also solicits contractors to submit bids in the installation of Quadrupole Loops in various sizes as specified in the pricing page. These installations will be on an on-call, as needed basis.
- 2.1.3 The contractor shall extend this pricing to the respective cities for additional work or furnish work the respective agency may request.
- 2.1.4 Successful contractor or contractors shall be required to obtain all applicable permits and licenses (including right-of-way permits) and to comply with all Federal, State and Local laws, ordinances, regulations and safety standards.
- 2.1.5 Contractors shall be required to obtain and comply with the applicable detector loop specifications of the agency that has jurisdiction where the detector loops are being installed.

2.2 **WORK LOCATION:**

Loop Detector installations shall be performed according to an approved State, County or Municipal Installation Work Order as per section 2.3, Work Schedule.

2.3 **WORK SCHEDULE:**

- 2.3.1 The work schedule shall be specified by the State, County or City Traffic Engineer of each respective jurisdiction and/or by the Contract Administrators authorized representative.
- 2.3.2 The State, County or City reserves the right to make minor adjustments in the schedule at any time in order to avoid conflict with roadway construction or maintenance operations, or to better serve the agency needs.
Work hours shall conform to the respective agencies' barricading manual where the work is being performed.
- 2.3.3 No work shall commence without prior written approval of the State, County or Municipal Transportation Department who has jurisdiction where the work is being completed.
- 2.3.4 Within five (5) working days of receipt of an approved County Loop Detector Installation Work Order, the Contractor shall provide the County with a confirming work schedule. The confirmation may be submitted by FAX, voice, phone or personal visit.

The schedule shall include number of workers, date of Blue Stake, Blue Stake Log Number, date and time that work shall start and anticipated completion time. Upon approval by the Department, the Contractor may implement the approved schedule.
- 2.3.5 The Contractor shall adhere to the approved work schedule and shall complete all routine work during the calendar week in which it is scheduled unless circumstances occur which are beyond the control of the Contractor. All scheduled work **NOT** completed during the week scheduled shall be reported to the Department in writing on the first work day of the following week. The report shall include an explanation of **WHY** the work was not completed and plans for getting the work on schedule.

2.4 WORK DETAILS:

2.4.1 General:

Detectors shall be installed as shown on the installation plans, as shown in the Standard Drawings, and as directed by the Engineer. The installation of the loop detectors shall be such that the operation shall not be affected by temperature changes, water, ice, rain, snow, chemicals, or electromagnetic noise. Contractor shall install, test, and have the loop detectors operational no later than sixty (60) days after issue of notice to proceed.

2.4.2 Hold Down Tabs:

Hold down tabs shall be used at the option of the agency responsible of the maintenance of the detector loop. This option shall be called out on the plan sets where applicable.

2.4.3 Saw Cut Sealant:

Saw cuts shall be sealed with an approved sealant. All slots cut in the pavement shall be blown out with a high-pressure stream of water and dried, before installing conductors.

After the conductors are installed in the slots, the slots shall be filled to within 1/8 inch of the pavement surface with the sealant. Before the sealant sets up, the surplus sealant shall be removed from the road surface without the use of solvents. City of Phoenix loop installations shall be filled flush with the pavement surface **(See Phoenix Loop Installation Supplement)**.

The handling of the sealant and the filling of the saw cut shall be in accordance with the directions of the manufacturer. Blotter sand shall be applied as directed by the Engineer.

2.4.4 Splices:

The detector sensor conductors shall be spliced to the detector lead-in cable in the adjacent pull box.

Detector lead-in cables shall run continuous and unspliced to the controller cabinet. Detector lead-in cables shall not be spliced without the approval of the Engineer.

All detector wire splices shall be soldered using resin core solder with 60 percent tin and 40 percent lead. The splices shall be sealed from moisture with self-encapsulating fit caps. When heated the fit cap's inner thermoplastic adhesive shall temporarily melt and the fit cap's outer wall will shrink. A weatherproof bond shall form as a result. **The City of Phoenix Signal Operations group shall complete all Loop splices in the City of Phoenix. (Contact Rich Jeriha @ 495-5885 to coordinate this action).**

The detector lead-in cable shield shall only be grounded on one end in the control cabinet.

2.4.5 Detector Loop Installation Field Tests:

Before and after the saw cut sealant has been installed, the Contractor shall perform an insulation resistance-to-ground test. The insulation resistance-to-ground shall be at least 100 megohms when measured at a voltage between 400 volts and 600 volts D.C.

The Contractor, at no cost to the State, County or Municipality, shall replace any loop detector that does not meet the above requirement or cannot be tuned to the Engineer's satisfaction.

2.4.6 Conduit Installations:

Conduits in protected areas such as behind curbs, in sidewalks, etc., that are not subject to any vehicular traffic shall be at a minimum depth of 24 inches.

Conduits installed under roadways, driveways or any open areas where it is possible for vehicles to drive, shall be at a minimum depth of 30 inches.

A permanent marker shall be placed on or back of the curb, over loop stub out.

The Contractor shall place warning tape in all trenches in which new conduit is placed. All warning tape shall be buried at a depth of six to eight inches below the finished grade.

Conduit entering pull boxes shall terminate a minimum of three inches inside the box wall. The conduit shall be between two inches and four inches above the bottom of the pull box and shall be sloped to facilitate pulling of conductors.

Conduit shall be installed under existing pavement by jacking or drilling methods approved by the Engineer.

Open trench excavation across an existing roadway shall not be permitted without the written permission of the Engineer. Jacking and drilling pits shall be kept two feet clear of the edge of the pavement. Pull boxes shall be installed in accordance with the details shown on the project plans and the standard drawings. Pull boxes shall be installed flush with the finished grade.

2.5 QUALITY CONTROL-MATERIAL:

2.5.1 VEHICLE DETECTORS:

2.5.1.1 General:

Detectors shall conform to the minimum acceptable design and operating requirements of these specifications for detecting the presence or passage of vehicles.

2.5.1.2 Loop Detectors:

The detector loop dimension shall be **6' x 6'** or as specified on the plans. The Contractor may bid a 6' dia. round loop as an alternative to the 6' x 6' loop. (If the Contractor bids a round loop, this shall be provided as a supplement to the conventional 6' x 6' loop. The loop shall have four turns of wire unless otherwise noted on the plans.)

2.5.1.2.1 Roadway Loop Detector Wire:

Roadway loop detector-wire shall be a factory assembled combination of PVC tubing and wire. Loop detector wire shall be stranded number 14 AWG copper rated at 600 volts with THWN insulation. **All loops are to be wire-in-duct Type wire (Detect-a-duct IMSA 51-5 or approved equal, #14 stranded, inside .25 inch PVC tubing). (See City of Phoenix Supplemental Loop Specification for Phoenix requirements)**

The wire shall be enclosed in a factory extruded PVC flexible tubing by the wire manufacturer. Contractor assembly of the wire in the flexible tubing shall not be acceptable.

2.5.1.2.2 Wire Marking Tags:

Wire marking tags shall conform to ADOT Standard Specification Section 732-2.02.

2.5.2 CABLE:

2.5.2.1 Shielded Cable:

Shielded cable used for loop detector lead-in cable shall be Beldon 8227, Beldon 8404, IMSA 50-2 or an approved equivalent. **The Contractor shall provide separate conductors for each loop to the control cabinet. (See City of Phoenix Supplemental Loop Specification for Phoenix requirements.)**

Conduit warning tape shall be a four mil inert plastic film specially formulated for prolonged use underground. All tape shall be highly resistant to underground to alkalis, acids, and other destructive agents found in the soil.

Tape shall have a continuous printed message warning of the location of underground conduits. The message shall be in permanent ink specifically formulated for prolonged underground use and shall bear the words, **"CAUTION--ELECTRIC LINE BURIED BELOW"** in black letters on a red background.

2.6 **INSTALLATION OF ELECTRICAL CONDUIT AND PULL BOXES:**

- 2.6.1 The Contractor may, at his option and expense, use a larger size conduit than specified provided the larger size is continuous for the entire length of the run from outlet to outlet. Reducing couplings shall not be permitted. Changes in the location and size shown on the installation plans shall be documented by the Contractor and submitted to the Engineer.
- 2.6.2 The PVC conduit shall be cut square and trimmed to remove all rough edges. Conduit connections shall be of the solvent weld type. Purple primer conforming to the requirements of ASTM F 656 shall be applied to the joined surfaces prior to use of cement.
- 2.6.3 The joint cement shall be the gray PVC cement conforming to the requirements of ASTM D 2564.
- 2.6.4 All PVC conduits shall be stored and handled in an approved manner to minimize ultraviolet deterioration due to exposure to sunlight.
- 2.6.5 Except for factory bends, conduit bends shall have a radius of not less than that specified in the NEC. Conduit shall be bent without crimping or flattening, using the longest radius practicable.

2.7 **SAW CUT SEALANT:**

- 2.7.1 Saw cut sealant shall be a flexible encapsulant intended for sealing and protecting vehicle detector loop wires installed in saw cuts.
- 2.7.2 The encapsulant shall be determined by the agency responsible for the maintenance of the loop (see enclosed supplemental loop specifications). The following represents local agency preference:

City of Phoenix - 3M Epoxy Loop Sealant
 City of Glendale - CrafcO Loop Sealant
 City of Tempe - CrafcO Loop Sealant
 Town of Paradise Valley - CrafcO Loop Sealant
 Town of Gilbert - CrafcO Loop Sealant
 ADOT - CrafcO Loop Sealant
 Maricopa County - CrafcO Loop Sealant

2.8 **MAINTENANCE AND PROTECTION OF TRAFFIC:**

- 2.8.1 All traffic shall be maintained through the work area and protected in accordance with the requirements of the Manual on Uniform Traffic Control Devices (as revised, including future revisions), the ADOT Traffic Control Manual for Highway Construction and Maintenance (as revised, including future revisions), Section 701-1 through 701-3 of the 2000 edition ADOT Standard Specifications for Road and Bridge Construction or Section 401 of the Maricopa County Department of Transportation Supplement to the Maricopa Association of Governments' Uniform Standard Specifications for Public Works Construction (as revised, including future revisions). **(Work in the City of Phoenix shall conform to the City of Phoenix Barricade Manual).**

The Manual form Uniform Traffic Control Devices is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The current price is unknown.

ADOT Traffic Control Manual for Highway Construction and Maintenance Supplement can be purchased from ADOT Records Administration Section, Engineering Records, Room 112F, 1655 W. Jackson Street, Phoenix, AZ 85007. Publication to request is: ADOT Traffic Control Manual Supplement Publication #31-088 and the cost is \$2.00.

These manuals address only minimum standards for traffic control.

If any conditions exist, which in the judgment of the Contract Administrator or their representative requires additional or special traffic control methods or signing, such traffic control shall be supplied by the Contractor at no additional cost to the Department **except as noted in Pricing Document (ATTACHMENT A).**

All traffic control devices shall be furnished by the Contractor and **MUST** be in place prior to the commencement of work. **No additional payment shall be made for traffic control.**

- 2.8.2 It is anticipated that certain phases of the work may require lane closures, or other lane restrictions. Lane closures or restrictions shall only be allowed during off peak traffic hours. The Contractor should plan for this possibility in the preparation of this bid package. **The contractor shall coordinate any lane closures or restrictions with the State, County or Municipal agency where the loops are being installed.**
- 2.8.3 When used, arrow-boards shall conform to the requirements of Section 4.17 of the Traffic and Control Manual. Arrow-boards shall be equipped with automatic and manual light intensity dimmer, which is capable of supplying adequate continuous power for the sign operation over extended periods of time.

2.9 **SUPERVISION:**

A Supervisor shall be on the job-site at all times when loop detector installation operations are taking place. **(See City of Phoenix Procedures for Traffic Signal Work for work to be performed in the City of Phoenix.)**

The Supervisor shall have the authority to make decisions concerning day to day operations and shall assist the Department's appointed representative in making on-site inspections and in coordinating other operational requirements.

The Supervisor shall be competent in matters relating to the specific job tasks involved in this contract and in matters relating to Traffic Control.

2.10 **QUALITY:**

- 2.10.1 The successful bidder must guarantee his product against any defect in workmanship or materials. Failure to comply with this requirement shall result in immediate return of the merchandise at the expense of the bidder for prompt replacement with merchandise meeting the standards listed herein. Should the bidder not meet this condition, the County shall obtain its requirements on the open market and the contractor shall be obligated to assume excess costs, if applicable.
- 2.10.2 The materials and supplies called for herein shall be the best of their grade and types, prepared according to the best available standards or accepted formulas, and thoroughly tested and subjected to rigid examination and standardization. Items not meeting these requirements shall be replaced at no cost to the County upon due notice of deficiency.

2.11 **STATE, COUNTY AND MUNICIPAL RESPONSIBILITIES:**

- 2.11.1 The State, County or Municipality shall approve all materials used in the loop installation.
- 2.11.2 Layout of loop detectors shall be verified by the State, County or Municipal Traffic Engineer's staff.
- 2.11.3 The State, County or Municipality shall perform periodic inspections to ensure contract compliance. It is anticipated that these inspections shall be performed on a daily basis.
- 2.11.4 The Contract Administrator or a designated county representative shall decide all questions, which may arise as to the quality and acceptability of any work performed under the contract.
- 2.11.5 The State, County or Municipality shall obtain random samples of materials delivered to the project. In the event that laboratory tests indicate non-compliance with the specifications outlined in Section 2.10, the contractor shall suspend all operations until corrective actions have been taken and material meets the specification requirements.

2.12 **CONTRACTOR'S RESPONSIBILITY:**

- 2.12.1 The Contractor shall have one (1) full time supervisor at the work site at all times work is being performed. The Supervisor shall have authority to make decisions concerning day to day loop detector installation operations.
- 2.12.2 Contractor shall **NOT** clean out trucks, bituminous trailers or hoses within the State, County or Municipal right-of-ways. Excess materials of any kind shall not be disposed of within any right-of-way.

- 2.12.3 The Contractor shall give the State, County or Municipality, three (3) working days advance notice prior to loop construction. **(The City of Phoenix requires 10 working days advance notice prior to loop construction)**
- 2.12.4 Contractor shall comply with Arizona Blue Stake Law. A.R.S. Chapter 2, Article 6.3, Section 40-360.21, 22, 23, 24, 25, 26, 27, 28, 30 and 31.
- 2.12.5 Any damage done to existing loops, conduits, conductors, or other signal equipment shall be replaced by and at the Contractor's expense, within 48 hours.
- 2.12.6 If damage occurs to the traffic signal, the damage shall be reported to the State, County or Municipal Signal Shop immediately (A list of contact persons for the respective agencies shall be available at the post award conference).

The Contractor shall be responsible to repair the damage immediately. A Police Officer shall be on site while any trenching is taking place within 200 feet of an arterial intersection. The Contractor may omit this requirement if approved by the State, County or Municipal agency that has jurisdiction where the work is being completed.
- 2.12.7 The Contractor shall submit to the State, County and Municipalities a complete list of materials Contractor proposes to incorporate into the project indicating brand or trade names, identification numbers, type and quantity. No material shall be ordered or installed without the approval of the State, County or Municipality.
- 2.12.8 The Contractor shall have a level II, IMSA Certified technician or a journeyman electrician on site at all times during construction. (See Phoenix supplement for specific requirements).

2.13 SAFETY:

- 2.13.1 The Contractor shall implement a Safety Plan to comply with the OSHA requirements and the State of Arizona Occupational Safety Standards.
- 2.13.2 Contractor's employees shall not park privately owned vehicles on the job-site. Contractor's vehicles parked at the job-site shall be in conformance with the requirements set forth in Section 2.8, MAINTENANCE AND PROTECTION OF TRAFFIC.
- 2.13.3 All Contractor personnel shall wear white hard hats, of an approved type, and approved high visibility red or orange shirts or vests while working within the contract area limits. Safety vests shall be replaced at any time that their visibility is reduced due to fading, becoming soiled or any other reasons.

2.14 RECORDS:

The Contractor shall keep a daily log of job progress. The log shall include date, time and location of start, traffic control devices used, events regarding days' progress (i.e., excavation, backfill, equipment, delivery delay etc.) The complete report shall be delivered to the Contract Administrator's designated representative at the conclusion of each day of operation.

2.15 WARRANTY:

The Contractor shall warrant materials and installation of all loop conductors, lead-ins and conduits for a period of twelve (12) months after installation and acceptance.

END OF SPECIFICATIONS

**FOLLOWING 6 PAGES – CITY OF PHOENIX SUPPLEMENTAL SPECIFICATIONS
“PROCEDURES FOR TRAFFIC SIGNAL WORK”**



City of Phoenix

TO:

DATE: September 30, 1997

FROM: Street Transportation Department
Operations Division, Traffic Signal Section

SUBJECT: PROCEDURES FOR TRAFFIC SIGNAL WORK

SCOPE

The following procedures shall be the sole responsibility of private developers and/or private contractors constructing or relocating City of Phoenix traffic signal equipment, except as noted. These procedures are in addition to other applicable specifications and policies of the City of Phoenix, Maricopa Association of Governments, and the Arizona Department of Transportation.

PROCEDURES

1. The City of Phoenix, Traffic Signal Shop (262-6733), shall be notified ten (10) working days prior to beginning any traffic signal work.
2. Existing traffic signal equipment shall remain operational and in full view of the intended traffic at all times until activation of new equipment. If necessary, temporary overhead cable shall be provided to maintain operation of signal equipment, as stated in Section V of the City Traffic Barricade Manual.
3. Underground conduit (including electrical conductors), junction boxes, controller foundations and pole foundations shall be installed as indicated on the approved project plans. Concrete shall be Class A, in accordance with Section 502 of the Standard Specifications of the City. Pole foundations shall cure a minimum of seven (7) days prior to standing poles.
4. All underground conduit shall be schedule 40 rigid polyvinyl chloride installed 24 inches to 30 inches below finished grade with exception for loop stub out conduits which shall be schedule 40 rigid PVC which shall be located 6 inches to 12 inches below the curb base.
5. All conduit runs shall be inspected by the City of Phoenix Traffic Signal locators or foremen before being covered. All traffic signal pole bases shall be inspected by

the traffic signal locators or foremen before being paved. The contractor shall contact the appropriate job foreman to request inspection or call 262-6204 and request inspection by traffic signal locator.

6. Traffic signal poles, mast arms, signal heads, pedestrian heads, pedestrian push buttons, controllers and electrical service panels and any and all related traffic signal equipment shall be installed as indicated on the approved project plans. The City will not supply any wire or cable for these projects.
7. A qualified journeyman electrician, who has successfully completed a recognized 4-year electrical apprenticeship program, or equivalent training, shall be on site at all times during the construction/installation of traffic signal equipment (i.e., all items cited in No. 4 above, as well as the pulling of conductors). Conductor splices shall only be made by said journeyman electrician, or by a person enrolled in a recognized 4-year electrical apprenticeship program, while under the direct supervision of the journeyman.
8. Equipment cited in No. 4 above may be picked up from the Traffic Signal Shop, 2631 South 22nd Avenue, thirty (30) days after receipt of a written list of required items and quantities. Incidental material, including required wire and cable, not specifically cited in No. 4 above, will not be supplied by the City. Mechanical devices and personnel for loading equipment onto vehicles of transport shall be provided by the party picking up such equipment. All equipment and procedures shall conform to OSHA regulations.
9. Foundation bolts and bolt cages may be secured from the City as in No. 6 above. Conductor wires, other than IMSA cable used in the signal poles shall be THHN/THWN #14AWG and will not be supplied by the City. Power service shall be 3-wire, #8 AWG or as specified. Shielded cable for Telco and loop detector lead-ins shall be IMSA No. 50-2 1984, AWG #16 stranded. IMSA multi-conductor cable as specified in the project plans shall be used. The City will not supply any wire or cable required on these projects.
10. The City of Phoenix shall be reimbursed, at cost, for all equipment and materials supplied in accordance with Nos. 4, 6, and 7 above.
11. Installation of signal heads and pedestrian heads shall conform to the Standard Mounting Detail. All heads shall be covered until activation, except 12-inch mast-arm heads, which shall NOT be installed until the day of activation. These coverings must be maintained in good repair.
12. When all equipment and wiring are in place and ready to be activated:

First: Give the Traffic Signal Shop forty-eight (48) hours advance notification (262-6733).

September 18, 1997

Page 3

Second: Have equipment and wiring inspected and approved by the Traffic Signal Shop.

Third: Provide for off-duty Police Officer control of the intersection at the time of activation.

Fourth: Make necessary conduit splices and pull in new conductors throughout entire conduit run (i.e., junction box to junction box). At existing signals, City forces will then splice the conductors in the junction boxes, thereby deactivating the old equipment and activating the new equipment. At new signals, the developer/contractor shall make conductor splices, as in No. 5 above.

13. Any existing equipment identified by the Traffic Signal Shop as salvageable shall be removed and delivered, in good order, to 2631 South 22nd Avenue and unloaded where designated. A credit will be made against the cost cited in No. 8 above for returned equipment, less a 20% handling charge. No used IMSA cable will be accepted as salvageable for credit.

14. Remnants of nonused signal equipment, foundations, conduits, junction boxes, etc., not identified in No. 11 above shall be removed and properly discarded by the developer/contractor.

S:\OPS\SIGNALS\MSB9703.WB1

INDUCTIVE LOOP SPECIFICATION

FOR ASPHALT INSTALLATION

Materials

Loop lead-in shielded cable shall be Two Conductor No. 16 AWG, IMSA Spec. No. 50-2, Clifford of Vermont (Part No. IP-16 T191 50-2) or approved equal.

Loop conductors shall be #14 AWG stranded, XHHW single-conductor. (IMSA Specification No. 51-3, 1984)

Slot sealant shall be 3-M detector Loop Sealant.

Installation and Testing

Lead-in cables shall be installed continuous and unbroken as indicted on the conductor schedule and the approved project plans, from the designated junction box into the controller cabinet. A minimum of five (5) feet of slack shall be provided in the controller cabinet and a minimum of three (3) feet of slack shall be provided in each junction box.

Slots and cores shall be saw cut and drilled into the pavement in the manner depicted on the Quadropole Loop Configuration Detail and positioned in accordance with the approved project plans. Slots shall be one-fourth (1/4) inch wide and deep enough to provide a minimum of two inches of sealant coverage. Drill cores shall be two and one-half (2.5) inches in diameter and two and one-half (2.5) inches deep. Slots shall be blown out and dried before installing loop conductors.

Loop conductors shall be installed and tested ONLY in the presence of an authorized representative of the City of Phoenix Traffic Signal Shop. Conductors installed without said representative in attendance, for any reason, shall be removed from the pavement and new conductors installed, all at the developer's expense. Each loop slot shall have the number of conductors laid in the directions indicated on the loop configuration detail. The beginning conductor shall be banded in the junction box with the symbol "S" and a minimum of three (3) feet of slack for each conductor shall be provided in each junction box.

Loop installations shall be made permanent (sealed) ONLY after successful testing. The loop conductors shall be temporarily spliced to the lead-in cables, as directed by the City representative, and each loop circuit shall then be tested at the controller cabinet.

1. Megger: A 600-volt megger test shall measure not less than ten (10) megohms resistance to ground.

2. Continuity: Loop circuit resistance shall not exceed two (2) ohms.

After successful testing, the loop conductor/lead-in cable splices shall be made permanent and the loop slots sealed. Conductor/lead-in splices shall be secured with wire nuts and then injected with a clear silicon sealant. Sealant shall be injected into all slots and, before setting, surplus sealant shall be struck off flush with and removed from the roadway surface.

The developer shall warrant both materials and installation of all loop conductors and lead-ins for a period of twelve (12) months following date of initial installation.

INDUCTIVE LOOP SPECIFICATION FOR CONCRETE INSTALLATION

Materials

Loop lead-in shielded cable shall be Two Conductor No. 16 AWG, IMSA Spec. No. 50-2, Clifford of Vermont (Part No. IP-16 T191 50-2) or approved equal.

Loop conductors shall be PYROTENAX M.I. Cable No. 309/4 LH.

Slot sealant shall be 3-M detector Loop Sealant.

Installation and Testing

All specifications for the installation and testing of loops installed in asphalt shall be followed except where noted.

1. Minimum of 0.5 inch wide saw cut (preferably cut within 48 hours of concrete pour).
2. Saw cuts shall be installed 2.5 inches deep or as denoted on the approved project plans.
3. All multiple saw cuts shall be connected through a 2.5 inch diameter by 2.5 inch deep core hole.
4. Loop shall be wired with PYROTENAX 4-conductor, mineral-insulated cable (distributor is PYROTENAX U.S.A., Inc.).
5. One 3 inch Schedule 40 PVC stub-out shall be provided for every two loops installed.
6. Each loop shall have its own separate lead-in saw cut to the stub-out.
7. Each loop shall have one turn installed as per conductor placement detail.
8. City of Phoenix shall make up cable ends as needed.
9. If loops are to be installed at a future time, all saw cuts in concrete shall be filled with sand to preserve the integrity of the saw cut.

S:\OPS\SIGNALS\MB9702.W81

2.16 **ACCEPTANCE:**

Upon successful completion of the performance period, the system shall be deemed accepted and the warranty period begins. All documentation shall be completed prior to final acceptance.

2.17 **FACILITIES:**

During the course of this Agreement, the County shall provide the Contractor's personnel with adequate workspace for consultants and such other related facilities as may be required by Contractor to carry out its obligation enumerated herein.

2.18 **TAX:**

No tax shall be levied against labor. Bid pricing to include all labor, overhead tools and equipment used, profit, and any taxes that may be levied. It is the responsibility of the Contractor to determine any and all taxes and include the same in bid price.

2.19 **REFERENCES:**

Contractors must provide at least five (5) reference accounts to which they are presently providing this service. Included must be the name of the government or company, individual to contact, phone number, street address and e-mail address. Preference in awarding this Contract may be given to Contractors furnishing government accounts similar in size to Maricopa County.

2.20 **DELIVERY:**

Delivery is required F.O.B. Destination, freight pre-paid within fifteen (15) days of receipt of Purchase Order, to any delivery location within Maricopa County as specified by the County. Contractor shall indicate on Pricing Documentation (Attachment A) any additional freight or handling charges that would be associated with special shipping and/or handling delivery.

2.21 **EXPEDITED DELIVERY:**

If the Using Agency determines that rush shipping or other alternate shipping is required, it shall notify the Contractor. The Contractor shall determine any additional costs associated with such delivery terms and communicate that cost to the Using Agency via fax or other reasonable means.

The Using Agency shall not advise the Contractor to proceed with shipment until acceptable terms are negotiated and a purchase order is issued. Upon determining that the additional costs are reasonable and proper, the Using Agency shall advise the Contractor to proceed.

Upon receipt of material and invoicing, the Using Agency shall ensure that any additional charges are in compliance with and do not exceed those costs stated in the Contract. The Using Agency shall retain all documents related to these costs within the agency purchase order file, for audit purposes.

2.22 **SHIPPING:**

Bid prices shall be made F.O.B. destination to the Using Agency within Maricopa County. The Contractor shall retain title and control of all goods until they are delivered and the contract coverage has been completed. All claims for visible or concealed damage shall be filed by the Contractor. The County will notify the Contractor of any damaged goods and shall assist the Contractor in arranging for inspection.

2.23 **STOCK:**

The Contractor shall be expected to stock locally sufficient quantities as may be necessary to meet the County's needs.

2.24 **SHIPPING DOCUMENTS:**

A packing list or other suitable shipping document shall accompany each shipment and shall include the following:

- (1) Name and address of the Contractor;
- (2) Name and address of the County Agency;
- (3) County purchase order number;
- (4) A description of material shipped, including item number, quantity, number of containers and package number, if applicable.

2.25 **INSTALLATION:**

The Contractor's price shall include delivery and setup in complete operating condition.

2.26 **ACCEPTANCE:**

Once the Materials have been delivered, the Using Agency shall have a reasonable opportunity to inspect them. The Using Agency shall have five (5) days to perform its acceptance testing and inspection of the Materials, after which time the Materials shall be deemed accepted unless the Using Agency rejects the Materials.

2.27 **WARRANTY:**

The minimum warranty period shall be twelve (12) months for both parts and labor. Warranty repair and/or replacement will be performed at no additional charge to Maricopa County. All warranty periods shall begin upon acceptance by the Using Agency.

2.28 **TESTING:**

Unless otherwise specified, Materials purchased will be inspected by the Using Agency to ensure the Materials meet the quality and quantity requirements of the Specifications. When deemed necessary by the County, samples of the Materials may be taken at random from stock received for submission to a commercial laboratory or other appropriate agency for analysis and tests as to whether the Materials conform in all respects to the Specifications. In cases where commercial laboratory reports indicate that the Materials do not meet the Specifications, the expense of such analysis is to be borne by the Contractor.

2.29 **BRAND NAME:**

Bids on brands other than those listed are subject to approval based on evaluation. Maricopa County reserves the right to request samples to determine quality and acceptability of products bid. In some cases brands have been listed to define quality of products desired and is not intended to be restrictive or limit competition. Products substantially equivalent to those designated shall qualify for consideration.

2.30 **WAREHOUSE/DISTRIBUTION CENTER:**

The Contractor shall have access to a local warehouse/distribution center with the Phoenix metropolitan area capable of providing the goods listed herein at the time of bid submission. Maricopa County reserves the right to inspect such warehouse/distribution center(s) to ensure compliance with terms and conditions of the Invitation for Bids.

2.30.1 Documentation that provides clear and convincing evidence that the replacement will be compatible with all the functions or uses of the discontinued product or model.

2.30.2 Documentation confirming that the price for the replacement is the same as or less than the discontinued product or model.

Product discontinuance applies only to those items specifically listed on any resultant contract. This will not apply to catalog items not specifically listed on any resultant contract.

2.31 **ORDERING AUTHORITY:**

Contractors should understand that any request for purchase of materials or services shall be accompanied by a valid purchase order, issued by Materials Management, or by a CAPA (Certified Agency Procurement Aid). **CAPA purchases are limited to values of less than \$2,500.00. No other request is valid.**

2.32 **MATERIALS MAINTENANCE:**

The Contractor shall provide for maintenance of Materials supplied under this Contract upon installation of equipment

2.33 **FACTORY AUTHORIZED SERVICE AVAILABILITY:**

The Contractor shall have and maintain a local factory authorized service station within the Phoenix metropolitan area. The station shall be capable of supplying and installing component parts, and troubleshooting, repairing and maintaining the Materials. Minimum service hours shall be from 8:00 A.M. to 5:00 P.M., Monday through Friday.

2.34 **OPERATING MANUALS:**

Upon delivery, Contractor shall provide comprehensive operational manuals, Materials service manuals, and schematic diagrams, if required by the Using Agency.

2.35 **COMPLIANCE WITH SPECIFICATIONS:**

The fact that a manufacturer chooses not to produce Materials to meet these Specifications will not be considered sufficient cause to adjudge these Specifications as restrictive. Contractor shall be required to offer Materials that meet or exceed the requirements of the Specifications, or is of equal or greater quality and functionality. Where Materials are offered that are not identical to the requirements contained in the Specifications, but are believed to be of equal or greater quality and functionality, bidders shall note such deviation and state why, in their opinion, the Materials are of equal or greater quality to the requirements of the Specifications. Maricopa County shall determine whether the deviation is material and if the substitute Materials are of equal or greater quality and functionality. Maricopa County retains the sole discretion to waive any deviation from or exception to the Specifications. Such deviations or exceptions may be grounds for rejection of the entire bid.

2.36 **TECHNICAL AND DESCRIPTIVE SALES LITERATURE:**

Contractor shall provide copies of its sales literature and brochures, and copies of any manufacturer's technical and descriptive literature regarding the material it proposes to provide. Literature shall include sufficient in detail to allow full and fair evaluation of the offer submitted, and must be included with the bid. Failure to include this information may result in the bid being rejected.

2.37 **ADDITIONAL PRICING:**

Contractors are strongly encouraged to offer additional pricing for related items/products/components, which are not specifically addressed as line items in the Invitation For Bids. Pricing offered should be noted on the pricing pages of the Contractor response in the format requested. Two sets of catalogs/pricing documents shall accompany any additional pricing offered.

2.38 **CONTRACTOR REVIEW OF DOCUMENTS:**

Contractor shall review its bid submission to assure the following requirements are met.

- 2.38.1 One (1) original and one (1) copy of all submissions is MANDATORY
- 2.38.2 Pricing pages, MANDATORY
- 2.38.3 Copies of Catalogs/Pricing Documents (if required)
- 2.38.4 Literature, Technical and Descriptive, MANDATORY
- 2.38.5 Vendor Information, MANDATORY
- 2.38.6 Agreement page, MANDATORY
- 2.38.7 References, MANDATORY

2.39 **MODEL YEAR EQUIPMENT:**

The County will only accept bids offering current model year equipment/product.

2.40 **ORDER CUTOFF INFORMATION:**

Contractors submitting proposals (bids) shall advise the County of all known order cutoff dates for the equipment/product specified in the Invitation for Bids at the time of submission. Notification of any subsequent cutoff date(s) (learned after submission) shall also be the responsibility of the Contractor. The Contractor shall advise the County of **subsequent cutoff dates** by notifying the Procurement Consultant, **in writing**, of this new information.

3.0 **SPECIAL TERMS & CONDITIONS:**

3.1 **CONTRACT LENGTH:**

This Invitation for Bids is for awarding a firm, fixed price purchasing contract to cover a one (1) year period.

3.2 **OPTION TO EXTEND:**

The County may, at their option and with the approval of the Contractor, extend the period of this Contract up to a maximum of four (4), one (1) year options. The Contractor shall be notified in writing by the Materials Management Department of the County's intention to extend the contract period at least thirty (30) calendar days prior to the expiration of the original contract period.

3.3 **INDEMNIFICATION AND INSURANCE:**

3.3.1 Indemnification.

To the fullest extent permitted by law, Vendor shall defend, indemnify, and hold harmless the County, its agents, representatives, officers, directors, officials, and employees from and against all claims, damages, losses and expenses, including but not limited to attorney fees and costs, relating to this Contract.

The amount and type of insurance coverage requirements set forth herein will in no way be construed as limiting the scope of the indemnity in this paragraph.

The scope of this indemnification does not extend to the negligence of the County.

3.3.2 Insurance Requirements.

Vendor, at its own expense, shall purchase and maintain the herein stipulated minimum insurance with companies duly licensed, possessing a current A.M. Best, Inc. Rating of B++6, or approved unlicensed companies in the State of Arizona with policies and forms satisfactory to the County.

All insurance required herein shall be maintained in full force and effect until all work or service required to be performed under the terms of the Contract is satisfactorily completed and formally accepted. Failure to do so may, at the sole discretion of the County, constitute a material breach of this Contract.

The Vendor's insurance shall be primary insurance as respects the County, and any insurance or self-insurance maintained by the County shall not contribute to it.

Any failure to comply with the claim reporting provisions of the insurance policies or any breach of an insurance policy warranty shall not affect coverage afforded under the insurance policies to protect the County.

The Vendor shall be solely responsible for the deductible and/or self-insured retention and the County, at its option, may require the Vendor to secure payment of such deductibles or self-insured retentions by a surety bond or an irrevocable and unconditional letter of credit.

The County reserves the right to request and to receive, within ten (10) working days, certified copies of any or all of the herein required insurance policies and/or endorsements. The County shall not be obligated, however, to review such policies and/or endorsements or to advise Vendor of any deficiencies in such policies and endorsements, and such receipt shall not relieve Vendor from, or be deemed a waiver of the County's right to insist on strict fulfillment of Vendor's obligations under this Contract.

The insurance policies required by this Contract, except Workers' Compensation, shall name the County, its agents, representatives, officers, directors, officials and employees as Additional Insureds.

The insurance policies required hereunder, except Workers' Compensation, shall contain a waiver of transfer of rights of recovery (subrogation) against the County, its agents, representatives, officers, directors, officials and employees for any claims arising out of Vendor's work or service.

3.3.2.1 Commercial General Liability. Vendor shall maintain Commercial General Liability insurance with a limit of not less than \$1,000,000 for each occurrence with a \$2,000,000 Products/Completed Operations Aggregate and a \$2,000,000 General Aggregate Limit. The policy shall include coverage for bodily injury, broad form property damage, personal injury, products and completed operations and blanket contractual coverage including, but not limited to, the liability assumed under the indemnification provisions of this Contract which coverage will be at least as broad as Insurance Service Office, Inc. Policy Form CG 00 01 10 93 or any replacements thereof.

The policy shall contain a severability of interest provision, and shall not contain a sunset provision or commutation clause, or any provision, which would serve to limit third party action over claims.

The Commercial General Liability additional insured endorsement shall be at least as broad as the Insurance Service Office, Inc.'s Additional Insured, Form CG 20 10 11 85, and shall include coverage for Vendor's operations and products and completed operations.

If the Vendor subcontracts any part of the work, services or operations awarded to the Vendor, Vendor shall purchase and maintain, at all times during prosecution of the work, services or operations under this Contract, an Owner's and Vendor's Protective Liability insurance policy for bodily injury and property damage, including death, which may arise in the performance of the Vendor's work, service or operations under this Contract. Coverage shall be on an occurrence basis with a limit not less than \$1,000,000 per occurrence, and the policy shall be issued by the same insurance company that issues the Vendor's Commercial General Liability insurance.

3.3.2.2 Automobile Liability. Vendor shall maintain Automobile Liability insurance with an individual single limit for bodily injury and property damage of no less than \$1,000,000, each occurrence, with respect to Vendor's vehicles (whether owned, hired, non-owned), assigned to or used in the performance of this Contract.

3.3.2.3 Workers' Compensation. The Vendor shall carry Workers' Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of Vendor's employees engaged in the performance of the work or services, as well as Employer's Liability insurance of not less than \$1,000,000 for each accident, \$1,000,000 disease for each employee, and \$1,000,000 disease policy limit.

If any work is subcontracted, the Vendor will require subcontractors to provide Workers' Compensation and Employer's Liability insurance to at least the same extent as required of the Vendor.

3.3.3 Certificates of Insurance.

Prior to commencing work or services under this Contract, Vendor shall furnish the County with certificates of insurance, or formal endorsements as required by the Contract in the form provided by the County, issued by Vendor's insurer(s), as evidence that policies providing the required coverage, conditions and limits required by this Contract are in full force and effect. Such certificates shall identify this contract number and title.

If a policy does expire during the life of the Contract, a renewal certificate must be sent to the County fifteen (15) days prior to the expiration date.

3.3.4 Occurrence Basis.

All insurance required by this contract shall be written on an occurrence basis rather than a claims-made basis.

3.3.5 Cancellation and Expiration Notice,

Insurance required herein shall not be permitted to expire, be canceled, or materially changed without thirty (30) days prior written notice to the County.

3.4 **FAILURE TO EXECUTE:**

Upon failure of the successful Contractor to execute the contract, the bid security shall be forfeited to the County, not as a penalty but as liquidated damages to offset the cost to the County of conducting another invitation for bids. Contractor acknowledges that the County's loss as a result of the Contractor's failure to execute a contract would be difficult to determine, and that the value of the bid security is a fair and reasonable estimate of what those damages might be.

3.5 **REQUIREMENT OF CONTRACT BOND:**

Concurrently with the submittal of the Contract, the Contractor shall furnish the Contracting Agency the following bonds, which shall become binding upon the award of the contract to the Contractor.

- (A) **A Performance Bond in the amount of \$10,000.00** conditioned upon the faithful performance of the Contract in accordance with plans, specifications and conditions thereof. Such bond shall be solely for the protection of the Contracting Agency awarding the Contract.
- (B) **A Payment Bond in the amount of \$10,000.00** solely for the protection of claimants supplying labor and materials to the Contractor or his Subcontractors in the prosecution of the work provided for in such Contract.

Each such bond shall include a provision allowing the prevailing party in a suit on such bond to recover as a part of his judgment such reasonable attorney's fees as may be fixed by a judge of the court.

Each bond shall be executed by a surety company or companies holding a certificate of authority to transact surety business in the State of Arizona issued by the Director of the Department of Insurance. The bonds shall not be executed by an individual surety or sureties. The bonds shall be made payable and acceptable to the Contracting Agency. The bonds shall be written or countersigned by an authorized representative of the surety who is either a resident of the State of Arizona or whose principal office is maintained in this state, as by law required, and the bonds shall have attached thereto a certified copy of the Power of Attorney of the signing official. In addition, said company or companies shall be rated "Best-A" or better as required by the Contracting Agency, as currently listed in the most recent Best Key Rating Guide, published by the A.M. Best Company.

3.6 **PROCUREMENT CARD ORDERING CAPABILITY:**

It is the intent of Maricopa County to utilize the Bank of America MasterCard Procurement Card, or other procurement card that may be used by the County from time to time, to place and make payment for orders under the Contract. Contractors without this capability may be considered non-responsive and not eligible for award consideration.

3.7 **INTERNET ORDERING CAPABILITY:**

It is the intent of Maricopa County to utilize the Internet to place orders under this Contract. Contractors without this capability may be considered non-responsive and not eligible for award consideration.

3.8 **INQUIRIES AND NOTICES:**

All inquiries concerning information herein shall be addressed to:

MARICOPA COUNTY
DEPARTMENT OF MATERIALS MANAGEMENT
ATTN: CONTRACT ADMINISTRATION
320 W. LINCOLN ST.
PHOENIX, AZ 85003

Administrative telephone inquiries shall be addressed to:

WALT PRICE, PROCUREMENT CONSULTANT, 602-506-3454
(wprice@mail.maricopa.gov)

Technical telephone inquiries shall be addressed to:

JIM BAKER, 602-506-4054

Inquiries may be submitted by telephone but must be followed up in writing. No oral communication is binding on Maricopa County.

3.9 **PRE-BID CONFERENCE:**

THERE WILL BE A NON-MANDATORY PRE-BID CONFERENCE ON FEBRUARY 6, 2002 AT THE MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION, 2901 W. DURANGO ST., PHOENIX, AZ 85009 FROM 10:00 A.M. TO 12:00 NOON IN THE COCHISE CONFERENCE ROOM.

4.0 **CONTRACT TERMS AND CONDITIONS:**

4.1 **LANGUAGE FOR REQUIREMENTS CONTRACTS:**

Contractors signify their understanding and agreement by signing this document, that the Contract resulting from this bid will be a requirements contract. However, this Contract does not guarantee any purchases will be made. It only indicates that if purchases are made for the materials contained in this Contract, they will be purchased from the Contractor awarded that item. Orders will only be placed when a need is identified by a Using Agency or department and proper authorization and documentation have been approved.

The Department of Materials Management reserves the right to cancel Purchase Orders within a reasonable period of time after issuance. Should a Purchase Order be canceled, the County agrees to reimburse the Contractor but only for actual and documentable costs incurred by the Contractor due to and after issuance of the Purchase Order. The County will not reimburse the Contractor for any costs incurred after receipt of County notice of cancellation, or for lost profits, shipment of product prior to issuance of Purchase Order, etc.

Contractors agree to accept verbal notification of cancellation from the Department of Materials Management with written notification to follow. By submitting a bid in response to the Invitation For Bids, the Contractor specifically acknowledges to be bound by this cancellation policy.

4.2 **ESCALATION:**

Any requests for reasonable price adjustments must be submitted thirty (30) days prior to the Contract Anniversary date. Justification for the requested adjustment in cost of labor and/or materials must be supported by appropriate documentation. Increases are subject to approval in writing by the Materials Management Department prior to any adjusted invoicing submitted for payment.

4.3 **UNCONDITIONAL TERMINATION FOR CONVENIENCE:**

Maricopa County may terminate the resultant Contract for convenience by providing sixty (60) calendar days advance notice to the Contractor.

4.4 **TERMINATION FOR DEFAULT:**

If the Contractor fails to meet deadlines, or fails to provide the agreed upon service/material altogether, a termination for default will be issued. The termination for default will be issued only after the County deems that the Contractor has failed to remedy the problem after being forewarned.

4.5 **TERMINATION BY THE COUNTY:**

If the Contractor should be adjudged bankrupt or should make a general assignment for the benefit of its creditors, or if a receiver should be appointed on account of its insolvency, the County may terminate this Contract. If the Contractor should persistently or repeatedly refuse or should fail, except in cases for which extension of time is provided, to provide enough properly skilled workers or proper materials, or persistently disregard laws and ordinances, or not proceed with work or otherwise be guilty of a substantial violation of any provision of this Contract, then the County may terminate this Contract. Prior to termination of this Contract, the County shall give the Contractor fifteen (15) calendar days written notice. Upon receipt of such termination notice, the Contractor shall be allowed fifteen (15) calendar days to cure such deficiencies.

4.6 **STATUTORY RIGHT OF CANCELLATION FOR CONFLICT OF INTEREST:**

Notice is given that pursuant to A.R.S. § 38-511 the County may cancel this Contract without penalty or further obligation within three years after execution of the contract, if any person significantly involved in initiating, negotiating, securing, drafting or creating the contract on behalf of the County is at any time while the Contract or any extension of the Contract is in effect, an employee or agent of any other party to the Contract in any capacity or consultant to any other party of the Contract with respect to the subject matter of the Contract. Additionally, pursuant to A.R.S § 38-511 the County may recoup any fee or commission paid or due to any person significantly involved in initiating, negotiating, securing, drafting or creating the contract on behalf of the County from any other party to the contract arising as the result of the Contract.

4.7 OFFSET FOR DAMAGES:

In addition to all other remedies at Law or Equity, the County may offset from any money due to the Contractor any amounts Contractor owes to the County for damages resulting from breach or deficiencies in performance under this contract.

4.8 ADDITIONS/DELETIONS OF SERVICE:

The County reserves the right to add and/or delete materials to this Contract. If a service requirement is deleted, payment to the Contractor will be reduced proportionately, to the amount of service reduced in accordance with the bid price. If additional materials are required from this Contract, prices for such additions will be negotiated between the Contractor and the County.

4.9 SUBCONTRACTING:

The Contractor may not assign this Contract or Subcontract to another party for performance of the terms and conditions hereof without the written consent of the County. All correspondence authorizing subcontracting must reference the Bid Serial Number and identify the job project.

The Subcontractor's rate for the job shall not exceed that of the Prime Contractor's rate, as bid in the pricing section, unless the Prime Contractor is willing to absorb any higher rates. The Subcontractor's invoice shall be invoiced directly to the Prime Contractor, who in turn shall pass-through the costs to the County, without mark-up. A copy of the Subcontractor's invoice must accompany the Prime Contractor's invoice.

4.10 AMENDMENTS:

All amendments to this Contract must be in writing and signed by both parties.

4.11 RETENTION OF RECORDS:

The Contractor agrees to retain all financial books, records, and other documents relevant to this Contract for five (5) years after final payment or until after the resolution of any audit questions which could be more than five (5) years, whichever is longer. The Department, Federal or State auditors and any other persons duly authorized by the Department shall have full access to, and the right to examine, copy and make use of, any and all said materials.

4.12 ADEQUACY OF RECORDS:

If the Contractor's books, records and other documents relevant to this Contract are not sufficient to support and document that allowable materials were provided, the Contractor shall reimburse Maricopa County for the materials not so adequately supported and documented.

4.13 AUDIT DISALLOWANCES:

If at any time it is determined by the Department that a cost for which payment has been made is a disallowed cost, the Department shall notify the Contractor in writing of the disallowance and the required course of action, which shall be at the option of the Department either to adjust any future claim submitted by the Contractor by the amount of the disallowance or to require repayment of the disallowed amount by the Contractor forthwith issuing a check payable to Maricopa County.

4.14 VALIDITY:

The invalidity, in whole or in part, of any provision of the Contract shall not void or affect the validity of any other provision of this Contract.

4.15 RIGHTS IN DATA:

The County shall have the use of data and reports resulting from this Contract without additional cost or other restriction except as may be established by law or applicable regulation. Each party shall supply to the other party, upon request, any available information that is relevant to this Contract and to the performance hereunder

1534 W SCOTT AVENUE, GILBERT, AZ 85233

CPC CONSTRUCTION INC, 1415 E. GUADALUPE, STE 103, TEMPE, AZ 85283

WILLING TO ACCEPT FUTURE SOLICITATIONS VIA EMAIL: ☒ YES ☐ NO

ACCEPT PROCUREMENT CARD: ☐ YES ☒ NO

REBATE (CASH OR CREDIT) FOR UTILIZING PROCUREMENT CARD: ☐ YES ☒ NO ☐ % REBATE

INTERNET ORDERING CAPABILITY: ☒ YES ☐ NO

OTHER GOV'T. AGENCIES MAY USE THIS CONTRACT: ☒ YES ☐ NO

6.0 PRICING:

PRICING SHEET C631002/B0605756

NIGP CODE 96884

(All unit prices to include installation and all incidentals)

ITEM DESCRIPTION		ASPHALT INSTALLATION (NON CITY OF PHOENIX)	CONCRETE INSTALLATION (NON CITY OF PHOENIX)	CITY OF PHOENIX
		UNIT PRICE	UNIT PRICE	UNIT PRICE
6.1	<u>COUNT STATION DETECTORS</u> (Includes one (1) lane traffic control cost)			
		\$324.00	\$378.00	\$378.00
6.1.1	6' x 6' Standard	\$300.00 /each	\$350.00 /each	\$350.00 /each
6.2	<u>PRESENCE DETECTORS</u> (Includes one (1) lane traffic control cost)			
		\$378.00	\$459.00	\$594.00
6.2.1	6' X 12' Quadrupole	\$350.00 /each	\$425.00 /each	\$550.00 /each
		\$405.00	\$486.00	&648.00
6.2.2	6' X 20' Quadrupole	\$375.00 /each	\$450.00 /each	\$600.00 /each
		\$432.00	\$540.00	\$756.00
6.2.3	6' X 30' Quadrupole	\$400.00 /each	\$500.00 /each	\$700.00 /each
		\$459.00	\$594.00	\$837.00
6.2.4	6' X 40' Quadrupole	\$425.00 /each	\$550.00 /each	\$775.00 /each

1534 W SCOTT AVENUE, GILBERT, AZ 85233

CPC CONSTRUCTION INC, 1415 E. GUADALUPE, STE 103, TEMPE, AZ 85283

ITEM DESCRIPTION		ASPHALT INSTALLATION (NON CITY OF PHOENIX)	CONCRETE INSTALLATION (NON CITY OF PHOENIX)	CITY OF PHOENIX
6.2	<u>PRESENCE DETECTORS</u>	<u>UNIT PRICE</u>	<u>UNIT PRICE</u>	<u>UNIT PRICE</u>
		\$540.00	\$729.00	\$891.00
6.2.5	6' X 50' Quadrapole	\$500.00 /each	\$675.00 /each	\$825.00 /each
		\$702.00	945.00	\$1026.00
6.2.6	6' X 70' Quadrapole	\$650.00 /each	\$875.00 /each	\$950.00 /each
		\$297.00	\$297.00	\$297.00
6.2.7	Pull Box (#5) installed	\$275.00 /each	\$275.00 /each	\$275.00 /each
6.2.8	2" Conduit installed (Native Landscape)			
		\$17.82	\$17.82	\$17.82
6.2.8.1	1' - 20'	\$16.50 /ft.	\$16.50 /ft.	\$16.50 /ft.
		\$14.26	\$14.26	\$14.26
6.2.8.2	21' - 100'	\$13.20 /ft.	\$13.20 /ft.	\$13.20 /ft.
		\$11.88	\$11.88	\$11.88
6.2.8.3	over 100'	\$11.00 /ft.	\$11.00 /ft.	\$11.00 /ft.
6.2.9	2" Conduit installed (Grass Landscape)			
		\$20.20	\$20.20	\$20.20
6.2.9.1	1' - 20'	\$18.70 /ft.	\$18.70 /ft.	\$18.70 /ft.
		\$16.63	\$16.63	\$16.63
6.2.9.2	21' - 100'	\$15.40 /ft.	\$15.40 /ft.	\$15.40 /ft.
		\$14.26	\$14.26	\$14.26
6.2.9.3	over 100'	\$13.20 /ft.	\$13.20 /ft.	\$13.20 /ft.
6.2.10	2" Conduit installed (Desert Landscape)			
		\$20.20	\$20.20	\$20.20
6.2.10.1	1' - 20'	\$18.70 /ft.	\$18.70 /ft.	\$18.70 /ft.
		\$16.63	\$16.63	\$16.63
6.2.10.2	21' - 100'	\$15.40 /ft.	\$15.40 /ft.	\$15.40 /ft.
		\$14.26	\$14.26	\$14.26
6.2.10.3	over 100'	\$13.20 /ft.	\$13.20 /ft.	\$13.20 /ft.

1534 W SCOTT AVENUE, GILBERT, AZ 85233

CPC CONSTRUCTION INC, 1415 E. GUADALUPE, STE 103, TEMPE, AZ 85283

ITEM DESCRIPTION		ASPHALT INSTALLATION (NON CITY OF PHOENIX)	CONCRETE INSTALLATION (NON CITY OF PHOENIX)	CITY OF PHOENIX
6.2	<u>PRESENCE DETECTORS</u>	<u>UNIT PRICE</u>	<u>UNIT PRICE</u>	<u>UNIT PRICE</u>
		\$29.16	\$29.16	\$29.16
6.2.11	2" Conduit installed (Under Driveways)	\$27.00 /ft.	\$27.00 /ft.	\$27.00 /ft.
		\$35.64	\$35.64	35.64
6.3	<u>Boring Under Roadway, 3" PVC</u> (Agency to provide pothole locations)	\$33.00 /lf.	\$33.00 /lf.	\$33.00 /lf.
		\$1.57	\$1.57	\$1.57
6.4	<u>Loop Lead-in Saw Cut per inch/foot</u>	\$1.45 /in. / lf.	\$1.45 /in. / lf.	\$1.45 /in. / lf.
		\$20.20	\$20.20	\$20.20
6.5	<u>Trenching/Concrete Encasing</u>	\$18.70 /lf.	\$18.70 /lf.	\$18.70 /lf.
6.6	<u>Additional Items</u>			
6.6.1	Traffic Control - additional lane closure, per lane	\$54.00 \$50.00 /each	\$54.00 \$50.00 /each	\$54.00 \$50.00 /each
6.6.2	Traffic Control - uniformed off duty police officer	\$43.20 \$40.00 /hour	\$43.20 \$40.00 /hour	\$43.20 \$40.00 /hour
		\$243.00	\$243.00	\$243.00
6.6.3	Boring only - pot hole location	\$225.00 /each	\$225.00 /each	\$225.00 /each
6.6.4	Additional services offered (Vender to itemize)			

1534 W SCOTT AVENUE, GILBERT, AZ 85233

CPC CONSTRUCTION INC, 1415 E. GUADALUPE, STE 103, TEMPE, AZ 85283

Terms:	NET 30
Federal Tax ID Number:	86-0461504
Telephone Number:	480-839-6300
Fax Number:	480-820- 9958 9959
Contact Person:	TROY COLBY
Vendor Number:	860461504 A
E-mail Address:	dtcoc.34@yahoo.com
Certificates of Insurance	Required
Performance Bond Required	\$10,000.00
Payment Bond Required	\$10,000.00
Contract Period:	To cover the period ending APRIL 30, 2003 2004.

C S CONSTRUCTION INC, 22023 N. 20TH AVE, STE A, PHOENIX, AZ 85027-2001

WILLING TO ACCEPT FUTURE SOLICITATIONS VIA EMAIL: ☒ YES ☐ NO

ACCEPT PROCUREMENT CARD: ☒ YES ☐ NO

REBATE (CASH OR CREDIT) FOR UTILIZING PROCUREMENT CARD: ☐ YES ☒ NO ☐ % REBATE

INTERNET ORDERING CAPABILITY: ☒ YES ☐ NO

OTHER GOV'T. AGENCIES MAY USE THIS CONTRACT: ☒ YES ☐ NO

6.0 PRICING:

PRICING SHEET C631002/B0605756
NIGP CODE 96884

(All unit prices to include installation and all incidentals)

ITEM DESCRIPTION		ASPHALT INSTALLATION (NON CITY OF PHOENIX)	CONCRETE INSTALLATION (NON CITY OF PHOENIX)	CITY OF PHOENIX
		UNIT PRICE	UNIT PRICE	UNIT PRICE
6.1 <u>COUNT STATION DETECTORS</u> (Includes one (1) lane traffic control cost)				
6.1.1	6' x 6' Standard	\$336.00 /each	\$284.00 /each	\$250.00 /each
6.2 <u>PRESENCE DETECTORS</u> (Includes one (1) lane traffic control cost)				
6.2.1	6' X 12' Quadrupole	\$411.00 /each	\$344.00 /each	\$335.00 /each
6.2.2	6' X 20' Quadrupole	\$504.00 /each	\$420.00 /each	\$405.00 /each
6.2.3	6' X 30' Quadrupole	\$635.00 /each	\$528.00 /each	\$505.00 /each
6.2.4	6' X 40' Quadrupole	\$753.00 /each	\$640.00 /each	\$607.00 /each

C S CONSTRUCTION INC, 22023 N. 20TH AVE, STE A, PHOENIX, AZ 85027-2001

ITEM DESCRIPTION		ASPHALT INSTALLATION (NON CITY OF PHOENIX)	CONCRETE INSTALLATION (NON CITY OF PHOENIX)	CITY OF PHOENIX
6.2	<u>PRESENCE DETECTORS</u>	<u>UNIT PRICE</u>	<u>UNIT PRICE</u>	<u>UNIT PRICE</u>
6.2.5	6' X 50' Quadropole	\$867.00 /each	\$722.00 /each	\$691.00 /each
6.2.6	6' X 70' Quadropole	\$1,140.00 /each	\$925.00 /each	\$880.00 /each
6.2.7	Pull Box (#5) installed	\$190.00 /each	\$190.00 /each	\$190.00 /each
6.2.8	2" Conduit installed (Native Landscape)			
6.2.8.1	1' - 20'	\$13.00 /ft.	\$13.00 /ft.	\$13.00 /ft.
6.2.8.2	21' - 100'	\$8.00 /ft.	\$8.00 /ft.	\$8.00 /ft.
6.2.8.3	over 100'	\$6.00 /ft.	\$6.00 /ft.	\$6.00 /ft.
6.2.9	2" Conduit installed (Grass Landscape)			
6.2.9.1	1' - 20'	\$13.00 /ft.	\$13.00 /ft.	\$13.00 /ft.
6.2.9.2	21' - 100'	\$8.00 /ft.	\$8.00 /ft.	\$8.00 /ft.
6.2.9.3	over 100'	\$7.00 /ft.	\$7.00 /ft.	\$7.00 /ft.
6.2.10	2" Conduit installed (Desert Landscape)			
6.2.10.1	1' - 20'	\$13.00 /ft.	\$13.00 /ft.	\$13.00 /ft.
6.2.10.2	21' - 100'	\$8.00 /ft.	\$8.00 /ft.	\$8.00 /ft.
6.2.10.3	over 100'	\$6.00 /ft.	\$6.00 /ft.	\$6.00 /ft.

C S CONSTRUCTION INC, 22023 N. 20TH AVE, STE A, PHOENIX, AZ 85027-2001

ITEM DESCRIPTION		ASPHALT INSTALLATION (NON CITY OF PHOENIX)	CONCRETE INSTALLATION (NON CITY OF PHOENIX)	CITY OF PHOENIX
6.2	<u>PRESENCE DETECTORS</u>	<u>UNIT PRICE</u>	<u>UNIT PRICE</u>	<u>UNIT PRICE</u>
6.2.11	2" Conduit installed (Under Driveways)	\$11.00 /ft.	\$11.00 /ft.	\$11.00 /ft.
6.3	<u>Boring Under Roadway, 3" PVC</u> (Agency to provide pothole locations)	\$13.00 /lf.	\$13.00 /lf.	\$13.00 /lf.
6.4	<u>Loop Lead-in Saw</u> <u>Cut per inch/foot</u>	\$2.30 /in. / lf.	\$2.30 /in. / lf.	\$2.30 /in. / lf.
6.5	<u>Trenching/Concrete Encasing</u>	\$22.00 /lf.	\$22.00 /lf.	\$22.00 /lf.
6.6	<u>Additional Items</u>			
6.6.1	Traffic Control - additional lane closure, per lane	\$140.00 /each	\$140.00 /each	\$140.00 /each
6.6.2	Traffic Control - uniformed off duty police officer	\$52.00 /hour	\$52.00 /hour	\$52.00 /hour
6.6.3	Boring only - pot hole location	\$160.00 /each	\$160.00 /each	\$160.00 /each
6.6.4	Additional services offered (Vender to itemize)			
1.	INSTALL TRAFFIC SIGNALS (POLES, ARMS, GEAR, HEADS, FOUNDATIONS, WIRE, ETC).			
2.	24 HOUR KNOCKDOWN RESPONSE TEAM FOR SIGNALS OR STREET LIGHTS.			
3.	STREET LIGHT REPLACEMENT (INSTALL NEW – MAINTENANCE OLD).			
4.	125 FT. CRANE CAPABILITIES.			
5.	BACKHOE SERVICE.			
6.	TROUBLESHOOTING INTERSECTIONS.			
7.	DIRECTIONAL BORING.			

C S CONSTRUCTION INC, 22023 N. 20TH AVE, STE A, PHOENIX, AZ 85027-2001

Terms:	NET 30
Federal Tax ID Number:	860395588
Telephone Number:	623-780-2221
Fax Number:	623-780-1270
Contact Person:	SHELDON LINCOLN
Vendor Number:	860395588
Company Website:	www.cscompanies.com
E-mail Address:	cscigary@yahoo.com
Certificates of Insurance	Required
Performance Bond Required	\$10,000.00
Payment Bond Required	\$10,000.00
Contract Period:	To cover the period ending APRIL 30, 2003 2004.